

March 15, 2010

Date

MEMORANDUM

TO: York County Wetlands Board
FROM: Virginia Marine Resources Commission, Habitat Management Division
SUBJECT: VMRC #10-0379 Camp Peary

The above-referenced application was e-mailed to your office on this date. There is a possibility that this project may involve wetlands. The Environmental Engineer responsible for your area has not yet seen this application and no determination has been made regarding its completeness. Please advise us of your determination in this matter and when a public hearing is scheduled if, in your judgment, wetlands are involved. You may also want to forward a copy of your response to the U.S. Army Corps of Engineers, Norfolk District, to advise them of your findings concerning this project.

Beth Howell

Division Office Manager

/blh
Attachment

Date

MEMORANDUM

TO: Virginia Marine Resources Commission, Habitat Management Division
FROM: Wetlands Board Staff

Review of the above-referenced application indicates this project:

- ☐ Does not involve wetlands. A letter will be forwarded to the applicant advising that no permit will be required from this Board.
- ☐ Does involve wetlands and a permit will be required. A public hearing has been tentatively scheduled for _____ at _____.
- ☐ Does involve wetlands but a permit will not be required because _____.
- ☐ Site inspection conducted on _____.
- ☐ No site inspection conducted.

Wetlands Board Staff Contact



DEPARTMENT OF DEFENSE
Armed Forces Experimental Training Activity
Camp Peary
1100 Executive Drive
Williamsburg, Virginia 23188-4005

09 March 2010

Virginia Marine Resources Commission (VMRC)
Habitat Management Division
2600 Washington Avenue, 3rd Floor
Newport News, Virginia 23607-0756

RE: Joint Permit Application for Shoreline Erosion Projects (Project 1: Lake Powell; Project 2:
New Conference Center)

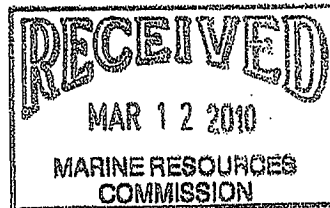
Dear Sir or Madame:

Please find enclosed the Joint Permit Application for construction of 1) 320 linear feet of rip rap revetment and associated bank grading at the Powell Lake dam along the York River; and 2) four 150' rip rap breakwaters and associated beach fill and wetland plantings along 870 linear feet of York River shoreline at the New Conference Center. The application has been developed with Mr. Lee Hill of the Virginia Department of Conservation and Recreation. There will be no encroachment below MLW caused by either project and there are no known archaeological sites associated with either project.

Please contact me at your earliest convenience should you wish to schedule a site visit to review the proposed projects. In the meantime, thank you for your timely assistance.

Sincerely,

Jennifer Davis
Chief, Environmental Division



Part 1 – General Information

PLEASE PRINT OR TYPE ALL RESPONSES: If a question does not apply to your project, please print N/A (not applicable) in the block or space provided. If additional space is needed, attach 8-1/2" x 11" sheets of paper.

County or City in which the project is located: York County
Waterway at project site: York River

1. Applicant's name* and complete mailing address:

AFETA Camp Peary
1100 Executive Drive
Williamsburg, VA 23188
ATTN: Jennifer Davis

Contact Information:

Home () _____
Work (757) 229-2121 x4263
Fax (757) 221-8621
Cell/ Pager () _____
e-mail _____

State Corporation Commission ID Number (if applicable) _____

2. Property owner(s) name* and complete address,
if different from applicant

Same as #1

Contact Information:

Home () _____
Work () _____
Fax () _____
Cell/ Pager () _____
e-mail _____

State Corporation Commission ID Number (if applicable) _____

3. Authorized agent name* and complete mailing
address (if applicable):

Same as #1

Contact Information:

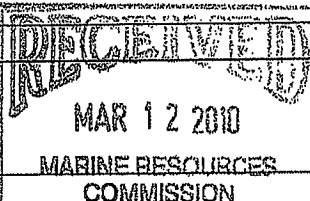
Home () _____
Work () _____
Fax () _____
Cell/ Pager () _____
e-mail _____

State Corporation Commission ID Number (if applicable) _____

*** If multiple applicants, property owners, and/or agents, each must be listed and each must sign the applicant signature page. If for a company, use the SCC registered name.**

4. Provide a detailed description of the project in the space below. If additional space is needed, provide a separate sheet of paper with the project description. Be sure to include how the construction site will be accessed, especially if clearing and/or grading will be required.

The proposed projects address 2 areas experiencing shoreline erosion on Camp Peary. The first project protects the Powell Lake dam by establishing a rip rap structure. The dam has experienced erosion due to storm surge and wave action associated with past and recent storms. The rip rap structure will be 320 feet in length and be composed of Class II rip rap underlaid by woven filter cloth to prevent further erosion. The second project protects approximately 870 feet of shoreline adjacent to the new Conference Center. The shoreline protection will be the "living shoreline" approach utilizing four 150-foot long rip rap breakwaters, beach fill and smooth cordgrass and saltmeadow hay plantings.

	FOR AGENCY USE ONLY	
	Notes: JPA # <u>10-0379</u>	

Part 1 - General Information (continued)

5. Have you obtained a contractor for the project? ____ Yes* ☒ No. *If your answer is "Yes" complete the remainder of this question and submit the Applicant's and Contractor's Acknowledgment Form (enclosed)

Contractor's name* and complete mailing address:

NOTE: Contractor to be selected through the bid process.

Contact Information:

Home () _____

Work () _____

Fax () _____

Cell / Pager () _____

email _____

State Corporation Commission ID Number (if applicable) _____

*** If multiple contractors, each must be listed and each must sign the applicant signature page. If for a company, use the SCC registered name.**

6. List the name, address and telephone number of the newspaper having general circulation in the area of the project. Failure to complete this question may delay local and State processing.

Name and complete mailing address:

Telephone number

(757) 247-4700 _____

The Daily Press Inc.
7505 Warwick Boulevard
Newport News, Virginia 23607

7. Give the following project location information:

Street Address (911 address if available) 1100 Executive Drive _____

Lot/Block/Parcel# _____

Subdivision _____

City / County Williamsburg, Virginia _____

If the project is located in a rural area, please provide driving directions.

Note: if the project is in an undeveloped subdivision or property, clearly stake and identify property lines and location of the proposed project. A supplemental map showing how the property is to be subdivided should also be provided.

Part 1 - General Information (continued)

8. What is the primary and secondary purpose of the project? For example, the primary purpose may be "to protect property from erosion due to boat wakes" and the secondary purpose may be "to provide safer access to a pier."

The primary purpose is to protect the Powell Lake dam and the shoreline fronting the Conference Center from erosion due to wave attack and storm surge. In addition, the projects address components of the Chesapeake Bay restoration plan by reducing sediment loads and establishing marsh grasses.

9. Proposed use (check one):

☐ Single user (private, non-commercial, residential)
☒ Multi-user (community, commercial, industrial, government)

10. Describe the measures that will be taken to avoid and minimize impacts, to the maximum extent practicable, to wetlands, surface waters, submerged lands, and buffer areas associated with any disturbance (clearing, grading, excavating) during and after project construction.

Please be advised that unavoidable losses of tidal wetlands and/or aquatic resources may require compensatory mitigation.

The proposed projects have been designed to minimize impacts to vegetated and non-vegetated wetlands, riparian buffers, and subaqueous bottom. The vegetated wetland impacts associated with the Powell Lake project are temporary and the disturbed area will be vegetated after construction is complete. The Conference Center shoreline project utilizes the "living shoreline" approach to minimize riparian buffer and bank grading impacts. Vegetated wetland impacts will be off-set by the planting of smooth cordgrass and saltmeadow hay.

11. Have you previously had a site visit, applied to, or obtained a permit from any agency (Federal, State, or Local) for any portion of the project described in this application or any other project at the site?

☐ Yes* ☒ No * If you answered "Yes", provide the following information:

<u>Agency / Representative</u>	<u>Activity</u>	<u>Permit/Project No.</u>	<u>Action** & Date</u>
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NOTE: Camp Peary has obtained permits for several shoreline erosion control projects over the past 20 years. The projects have utilized bank grading and riprap structures; riprap and gabion basket breakwaters with beach nourishment and marsh grass plantings; and solely marsh grass plantings.

(**Issued, Denied, Withdrawn, or Site Visit)

Part 1 - General Information (continued)

12. Is this application being submitted for after-the-fact authorization for work which has already begun or been completed? Yes X No. If yes, be sure to clearly depict the portions of the project which are already complete in the project drawings.

NOTE: Projects to be Bid and construction started after all applicable permits received.

13. Approximate cost of the entire project (materials, labor, etc.): \$ 800,000 [(1) 200,000 (2) 600,000]
Approximate cost of that portion of the project which is below mean low water: \$ 0

14. Completion date of the proposed work: October 1, 2010 -

15. Adjacent Property Owner Information: List the name and complete mailing address, including zip code, of each adjacent property owner to the project. (NOTE: a property owner/applicant cannot be their own adjacent property owner. You must give the next owner down the river, creek, etc).

N/A

NOTE: Both proposed projects are located well within the confines of Camp Peary and adjacent property impacts are none existent.

Part 2 - Signatures

1. Applicants and property owners (if different from applicant).

NOTE: REQUIRED FOR ALL PROJECTS

PRIVACY ACT STATEMENT: The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972. These laws require that individuals obtain permits that authorize structures and work in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters prior to undertaking the activity. Information provided in the Joint Permit Application will be used in the permit review process and is a matter of public record once the application is filed. Disclosure of the requested information is voluntary, but it may not be possible to evaluate the permit application or to issue a permit if the information requested is not provided.

CERTIFICATION: I am hereby applying for all permits typically issued by the DEQ, VMRC, U.S. Army Corps of Engineers, and/or Local Wetlands Boards for the activities I have described herein. I agree to allow the duly authorized representatives of any regulatory or advisory agency to enter upon the premises of the project site at reasonable times to inspect and photograph site conditions, both in reviewing a proposal to issue a permit and after permit issuance to determine compliance with the permit.

In addition, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jennifer Davis

Applicant's Name (printed/typed)

(Use if more than one applicant)


Applicant's Signature

(Use if more than one applicant)

3/10/10
Date

Property Owner's Name (printed/typed)
(If different from Applicant)

(Use if more than one owner)

Property Owner's Signature

(Use if more than one owner)

Date

Part 2 – Signatures (continued)

2. Applicants having agents (if applicable)

CERTIFICATION OF AUTHORIZATION

I (we), _____, hereby certify that I (we) have authorized _____
(Applicant's name(s)) (Agent's name(s))
to act on my behalf and take all actions necessary to the processing, issuance and acceptance of this permit and
any and all standard and special conditions attached.
We hereby certify that the information submitted in this application is true and accurate to the best of our
knowledge.

(Agent's Signature)

(Use if more than one agent)

(Date)



(Applicant's Signature)

(Use if more than one applicant)

3/10/10

(Date)

3. Applicant's having contractors (if applicable)

CONTRACTOR ACKNOWLEDGEMENT

I (we), _____, have contracted _____
(Applicant's Name(s)) (Contractor's Name(s))
to perform the work described in this Joint Permit Application, signed and dated _____.

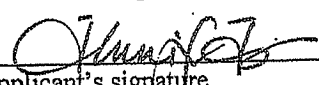
We will read and abide by all conditions set forth in all Federal, State and Local permits as required for this project. We understand that failure to follow the conditions of the permits may constitute a violation of applicable Federal, state and local statutes and that we will be liable for any civil and/or criminal penalties imposed by these statutes. In addition, we agree to make available a copy of any permit to any regulatory representative visiting the project to ensure permit compliance. If we fail to provide the applicable permit upon request, we understand that the representative will have the option of stopping our operation until it has been determined that we have a properly signed and executed permit and are in full compliance with all terms and conditions.

Contractor's name or name of firm

Contractor's or firms address

Contractor's signature and title

Contractor's License Number



Applicant's signature

(use if more than one applicant)

3/10/10

Date

Part 3 – Appendices (continued)

Appendix B: Projects for Shoreline Stabilization in tidal wetlands, tidal waters and dunes/beaches (including riprap revetments and associated backfill, marsh toe stabilization, bulkheads and associated backfill, breakwaters, beach nourishment, groins, jetties, etc). Answer all questions that apply. Please provide any reports provided from the Shoreline Erosion Advisory Service.

NOTE: Information on non-structural, vegetative alternatives (i.e. Living Shoreline) for shoreline stabilization is available at http://ccrm.vims.edu/coastal_zone/living_shorelines/index.html.

1. For riprap, bulkheads, marsh toe, breakwaters, groins, jetties: What is the overall length of the structure(s)? (1) 320; (2) 600 linear feet. If applicable, what is the volume of the associated backfill? (2) 4,957 cubic yards.
2. What is the maximum encroachment channelward of mean high water? (2) 119 feet.
channelward of mean low water? 0 feet.
channelward of the back edge of the dune or beach? 0 feet.
3. Please calculate the square footage of encroachment over:
 - Vegetated wetlands 1920; 3000 square feet
 - Nonvegetated wetlands (2) 27,300 square feet
 - Subaqueous bottom 0 square feet
 - Dune and/or beach 0 square feet

4. For bulkheads, is any part of the project maintenance or replacement of a previously authorized, currently serviceable, existing structure? Yes No.

If yes, will the construction of the new bulkhead be no further than two (2) feet channelward of the existing bulkhead? Yes No.

If no, please provide an explanation for the purpose and need for the additional encroachment.

NOTE: No bulkheads are proposed.

5. Describe the type of construction and all materials to be used, including source of backfill material, if applicable (e.g. vinyl sheet-pile bulkhead, timber stringers and butt piles, 100% sand backfill from upland source; broken concrete core material with Class II quarry stone armor over filter cloth).

NOTE: Drawings must include construction details, including dimensions, design and all materials, including fittings if used.

Powell Lake project: Class II Riprap over woven filter cloth; fill needed will utilize on-site material generated by reshaping of the dam face. Conference Center: Class II Riprap over woven filter cloth with truck-hauled beach nourishment from off base upland site. See attached drawings for additional information.

6. If using stone, broken concrete, etc., for your structure(s), what is the average weight of the:
Core (inner layer) material 150 - 500 pounds per stone Class size II
Armor (outer layer) material 150 - 500 pounds per stone Class size II

Part 3 – Appendices (continued)

7. For beach nourishment, including that associated with breakwaters, groins or other structures, provide the following:

- Volume of material

0	cubic yards channelward of mean low water
4,957	cubic yards landward of mean low water
- Area to be covered

0	square feet channelward of mean low water
30,300	square feet landward of mean low water
- Source of material, composition (e.g. 90% sand, 10% clay): Upland source; match existing material
- Method of transportation and placement: Truck haul and placed by tracked equipment
- Describe any proposed vegetative stabilization measures to be used, including planting schedule, spacing, monitoring, etc.:
Smooth cordgrass and saltmeadow hay to be planted per specifications provided on the drawings.
Plantings to be in the spring of 2011 after beach nourishment has stabilized over the winter.

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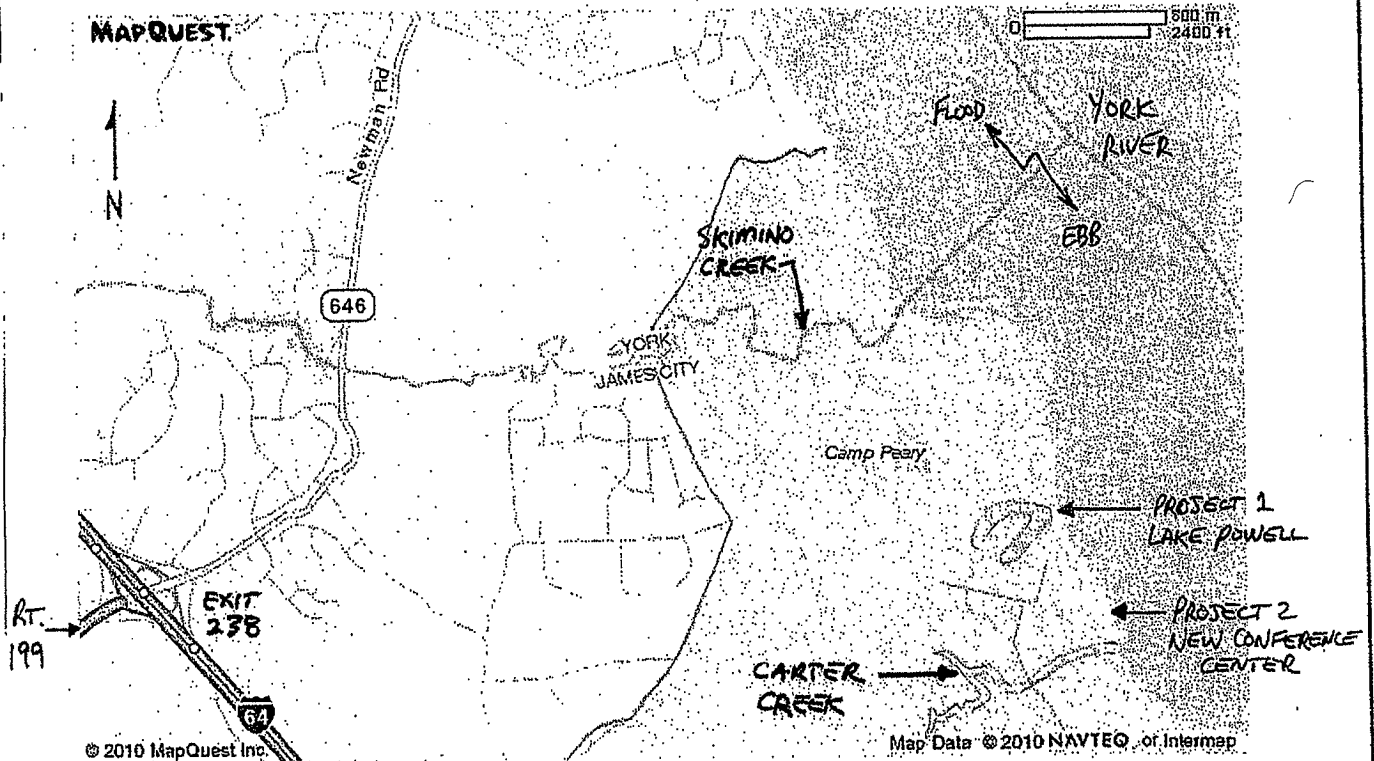
MAPQUEST.

Map of EXIT 238/CAMP
 PEARY/W

I-64 W, Williamsburg, VA 23188

Notes

Project Sites 1 & 2 for Joint Permit
 Application



PURPOSE: EROSION CONTROL AT
 PROJECT 1 - POWELL LAKE
 PROJECT 2 - NEW CONFERENCE
 CENTER

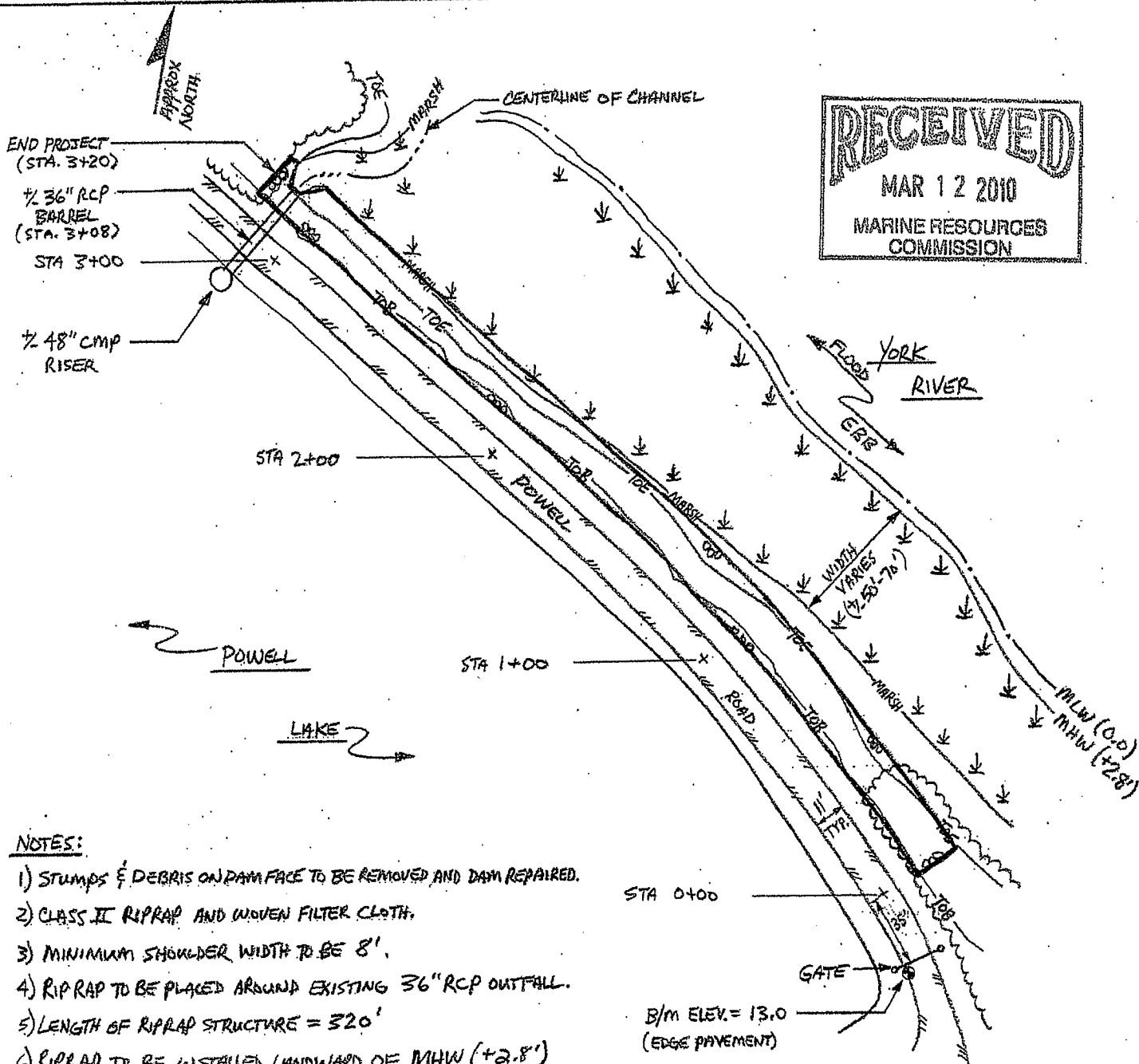
VICINITY MAP

AFETA CAMP PEARY
 1100 EXECUTIVE DRIVE
 WILLIAMSBURG, VA 23188

SHORELINE EROSION CONTROL
 PROJECT AT CAMP PEARY
 ON THE YORK RIVER

DATE: 09 MARCH 2010

PAGE 1 OF 6



NOTES:

- 1) STUMPS & DEBRIS ON DAM FACE TO BE REMOVED AND DAM REPAIRED.
- 2) CLASS II RIPRAP AND WOVEN FILTER CLOTH.
- 3) MINIMUM SHOULDER WIDTH TO BE 8'.
- 4) RIPRAP TO BE PLACED AROUND EXISTING 36" RCP OUTFALL.
- 5) LENGTH OF RIPRAP STRUCTURE = 320'
- 6) RIPRAP TO BE INSTALLED LANDWARD OF MHW (+2.8')
- 7) TOP OF BANK HEIGHT VARIES +10' - +12'; WIDTH FROM EDGE OF PAVEMENT VARIES 6' - 11'.
- 8) TOE OF SLOPE ELEVATION VARIES +5' - +9'; HORIZONTAL DISTANCE FROM TOB VARIES 6' - 16'.

LEGEND:

- ↓ = MARSH
- /// = PAVEMENT
- TOB = TOP OF BANK
- TOE = TOE OF SLOPE
- = LIMITS OF PROPOSED RIPRAP
- ~ = TREE LIMITS

PURPOSE: EROSION CONTROL AT
POWELL LAKE
(PROJECT 1)

DATUM: MLW (0.0)

DATE: 09 MARCH 2010

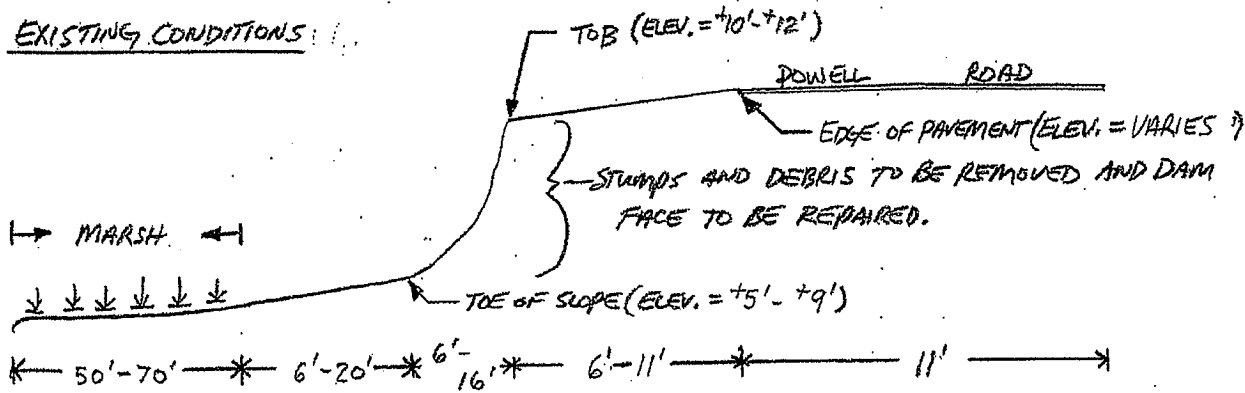
PLAN VIEW (NOT TO SCALE)

AFETA/CAMP PERRY
1100 EXECUTIVE DRIVE
WILLIAMSBURG, VA 23188

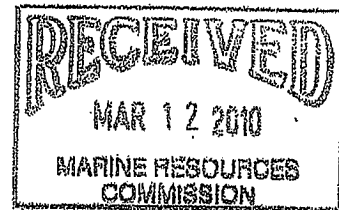
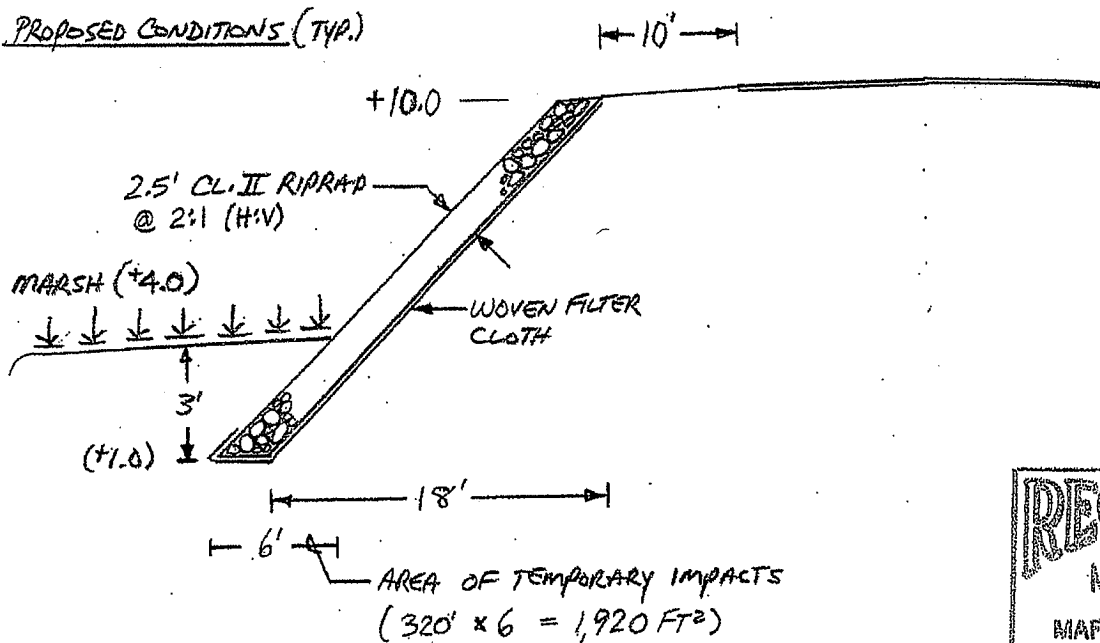
SHORELINE EROSION CONTROL
PROJECT AT CAMP PERRY
ON THE YORK RIVER

PAGE 2 OF 6

EXISTING CONDITIONS:



PROPOSED CONDITIONS (TYP.)



NOTES:

- 1) TEMPORARY WETLAND IMPACTS = $320' \times 6' = 1,920 \text{ FT}^2$
- 2) MINIMUM SHOULDER WIDTH = 10'
- 3) TOE OF RIP RAP SHALL BE BURIED TO ELEVATION +1.0, APPROXIMATELY 3' BELOW EXISTING MARSH.

PURPOSE: EROSION CONTROL AT
POWELL LAKE
(PROJECT 1)

DATUM: MLLW (0.0)

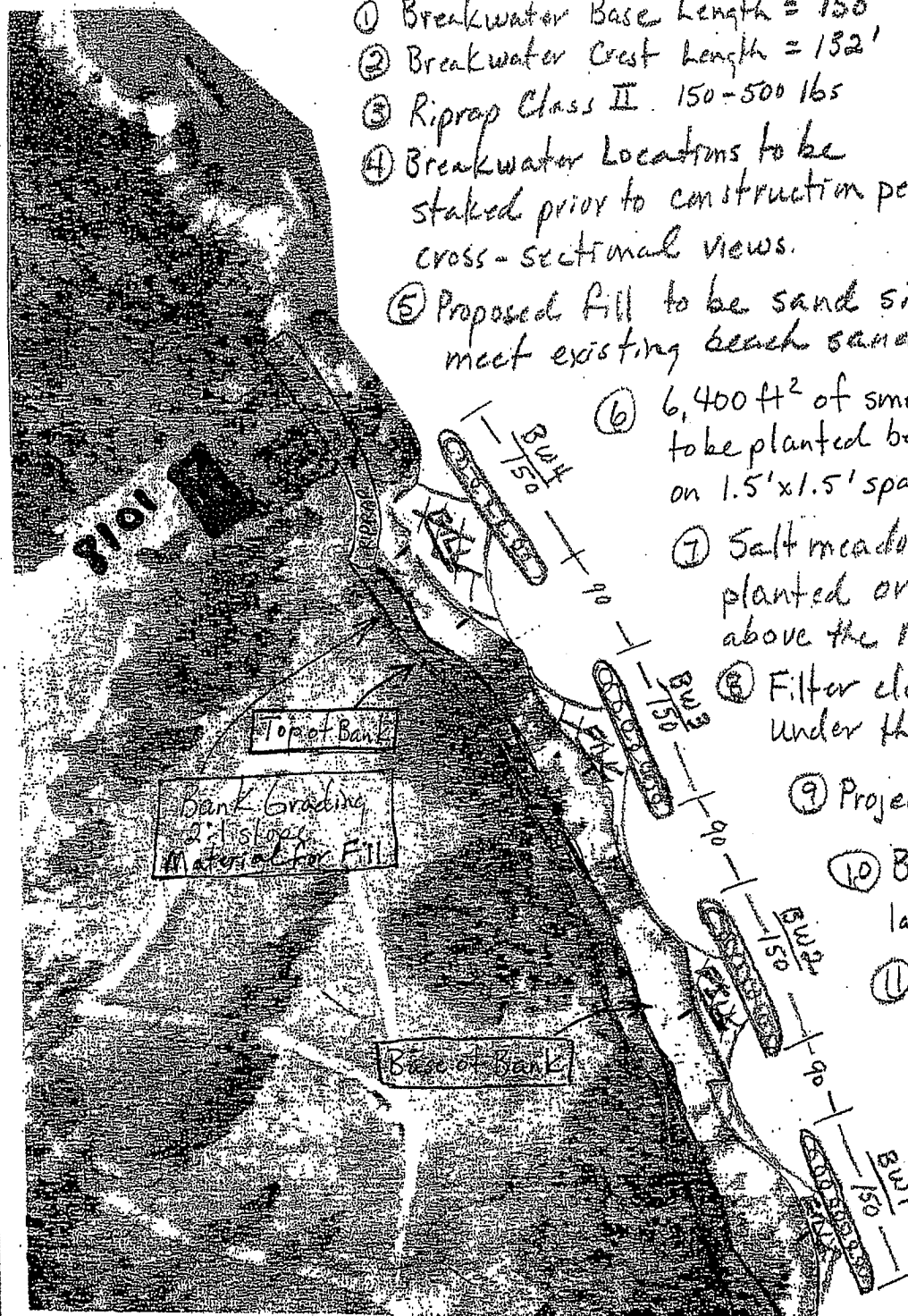
DATE: 09 MARCH 2010

CROSS-SECTIONS (NOT TO SCALE)

AFETA/CAMP PEARY
1100 EXECUTIVE DRIVE
WILLIAMSBURG, VA 23188

SHORELINE EROSION CONTROL
PROJECT AT CAMP PEARY
ON THE YORK RIVER

PAGE 3 OF 6



- ① Breakwater Base Length = 150'
- ② Breakwater Crest Length = 132'
- ③ Riprap Class II 150-500 lbs
- ④ Breakwater Locations to be staked prior to construction per cross-sectional views.

- ⑤ Proposed fill to be sand sized to meet existing beach sand.

- ⑥ 6,400 ft² of smooth cordgrass to be planted behind breakwaters on 1.5' x 1.5' spacings (1600 ft² x 4)

- ⑦ Salt meadow Hay to be planted on 1.5' x 1.5' spacings above the MHW elevation.

- ⑧ Filter cloth to be placed under the riprap.

- ⑨ Project Length = 870'

- ⑩ Breakwaters located landward of MLW.

- ⑪ Breakwaters located channel ward of MHW per cross-sectional views.

- ⑫ Bank behind BW4 to be graded to a 2:1 slope (approximately 90')

PURPOSE: EROSION CONTROL AT NEW
CONFERENCE CENTER
(PROJECT 2)

Datum: MLW (0.0)

DATE: 09 MARCH 2010

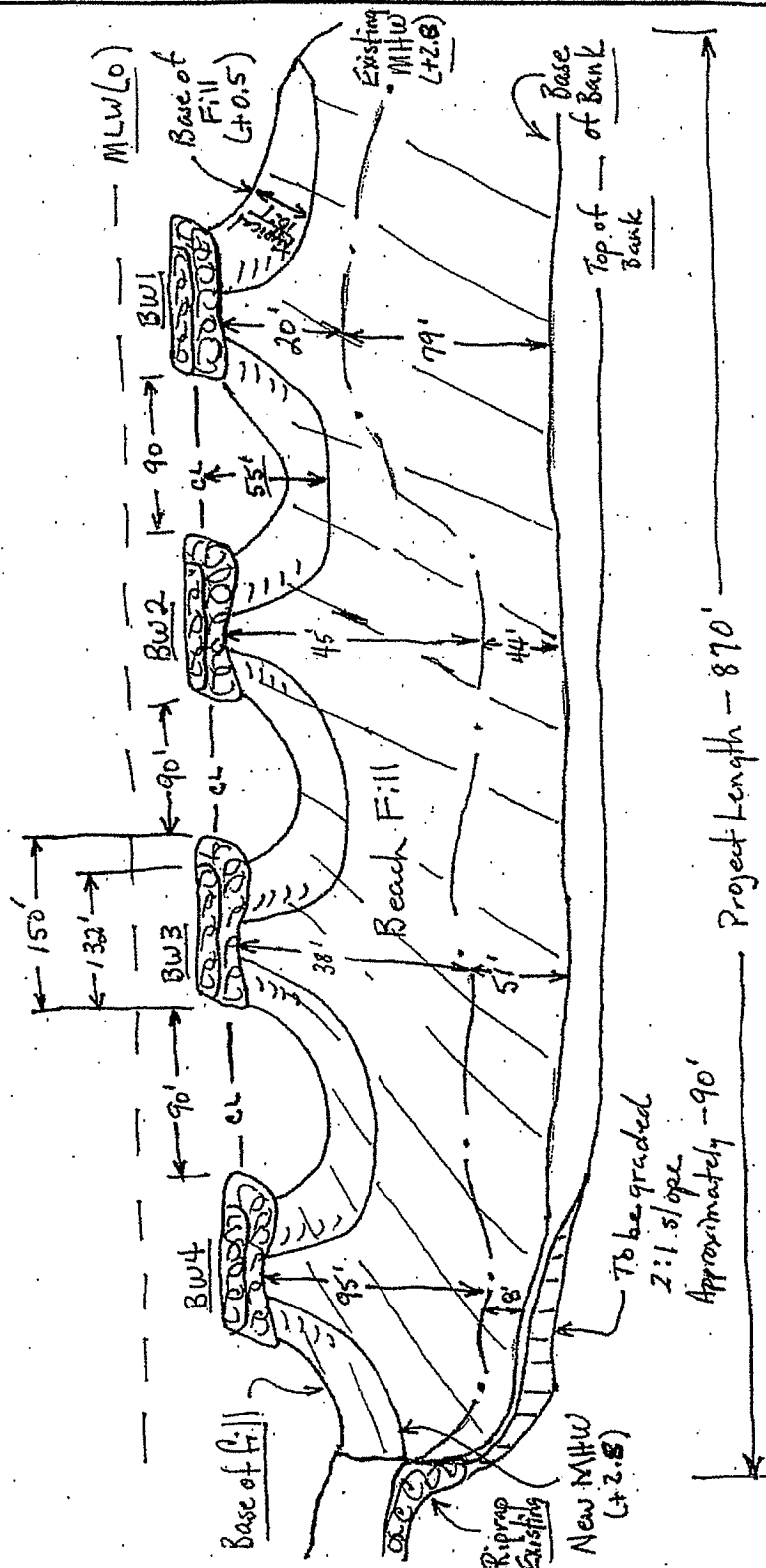
PLAN VIEW (NOT TO SCALE)

AFETA CAMP PEARY
1100 EXECUTIVE DRIVE
WILLIAMSBURG, VA 23187

SHORELINE EROSION CONTROL
PROJECT AT CAMP PEARY

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- ① Breakwater locations to be staked prior to construction
- ② Smooth cordgrass and saltmeadow hay to be planted on 1.5'x1.5' spacing.
Smooth cordgrass between base of fill and MHW; Saltmeadow hay between MHW and base of bank.
- ③ Material from bank grading to be used as beach fill.
- ④ Graded bank to be seeded and mulched.
- ⑤ Beach fill to be sized to meet existing sand conditions for sand to be truckhauled.
- ⑥ Beach form to be staked prior to fill being placed to limit loss of material.



Not to Scale

PURPOSE: EROSION CONTROL AT
NEW CONFERENCE CENTER
(PROJECT 2)

DATUM: MLW (0.0)

DATE: 09 MARCH 2010

LAYOUT PLAN

AFETA CAMP PERRY
1100 EXECUTIVE DRIVE
WILLIAMSBURG, VA 23188

SHORELINE EROSION CONTROL

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COMMISSION

PAGE 5 OF 6

Beach Fill Estimates

$$\begin{aligned} BW4 &: \frac{[1/2(60+240)100] \times 3.5}{27} = 1652 \text{ yd}^3 \\ BW2 &: \frac{[1/2(60+240)75] \times 3.5}{27} = 1458 \text{ yd}^3 \\ BW2 &: \frac{[1/2(60+240)75] \times 3.5}{27} = 1458 \text{ yd}^3 \\ BW1 &: \frac{[1/2(60+240)20] \times 3.5}{27} = 389 \text{ yd}^3 \end{aligned}$$

$$\frac{\text{Total}}{4,957 \text{ yd}^3}$$

$$\begin{aligned} \text{Beach Fill (MHW to Base of Bank)} &= 40\% \text{ of Total} = 1,983 \text{ yd}^3 \\ \text{Beach Fill (MHW to Base of Breakwater)} &= 60\% \text{ of Total} = 2,974 \text{ yd}^3 \end{aligned}$$

Beach Fill to be staked with contractor per the plan and Placement of Beach Fill to minimize impacts to existing vegetation cross-sectional views to minimize impacts to existing vegetation. Wetland Impacts = vegetated - 3,000 sq. ft.; nonvegetated intertidal zone - 27,300 sq. ft.

Existing MHW to Base of Breakwater
BW1: 20
BW2: 45
BW3: 38
BW4: 95

PURPOSE: EROSION CONTROL AT NEW CONFERENCE CENTER (PROJECT 2)

DATUM: MLW (0.0)

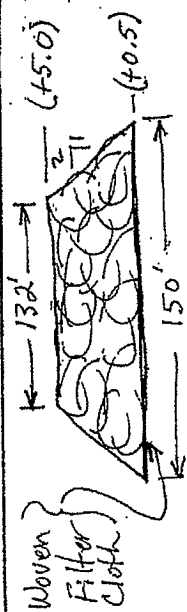
DATE: 09 MARCH 2010

SECTION VIEW (NOT TO SCALE)

AFETA CAMP PERRY
1100 EXECUTIVE DRIVE
WILLIAMSBURG, VA 23188

SHORELINE EROSION CONTROL

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Front View: Breakwater
Class II Riprap (150-500#)

Not to Scale

